

AMENDMENTS TO THE CLAIMS

Please add or amend the claims to read as follows, and cancel without prejudice or disclaimer to resubmission in a divisional or continuation application claims indicated as cancelled:

1. – 4. (Cancelled)

5. (Currently amended) ~~The method of claim 1,~~ A method of controlling an access of a station to a shared wireless media comprising:

calculating a first probability value representing a probability of a first station to transmit a data packet within a desired time slot of a contention window by counting data packets transmitted within said contention window to provide a first number, counting the data packets transmitted from said first station to provide a second number and dividing said second number by said first number;

calculating a second probability value representing a probability of said data packet when transmitted by the first station within the desired time slot of said contention window to collide with at least one other data packet transmitted by a second station; and

transmitting a data packet from said first station to a shared wireless media based on a collision rate parameter calculated from said first and said second probability values.

wherein said second probability value is calculated by counting data packets transmitted within said desired slot to provide a third number;

counting data packets transmitted within said contention window to provide a fourth number; and

dividing the third number by the fourth number.

6. (Currently Amended) The method of claim 5, comprising:

storing the first number in a first array and storing the second number in a second array, wherein a common index to the first and second arrays indicates on the desired time slot of the contention window of which the first number and the second number is related to.

7. (Original) The method of claim 6, comprising:

transmitting an additional data packet by the first station;
recalculating the second probability value; and
updating the first and second arrays according to the recalculated
second probability.

8. (Cancelled)
9. (Cancelled)
10. (Cancelled)
11. (Cancelled)
12. (Cancelled)
13. (Currently Amended) The station of claim 14 ~~[[12]]~~ comprising:
 ~~a software module~~ computer executable instructions to
 calculate the second probability value by dividing the first number
 with the second number.
14. (Currently Amended) ~~The station of claim 12,~~ A station comprising:
 a computer readable medium encoded with computer executable
 instructions to control transmission between the station and a shared
 wireless media based on a collision rate parameter calculated from at
 least a first probability value representing a probability of the station
 to transmit a data packet within a desired time slot of a contention
 window and a second probability value representing a probability of
 said data packet, when transmitted by the station within the desired
 time slot of said contention window, to collide with at least one other
 data packet transmitted by another station; and
 a transmitter to transmit a data packet to said shared wireless
 media responsive to the control of said station,

 wherein the station comprises:
 a first counter to count a first number of data packets transmitted
 within said desired slot; and

 a second counter to count a second number of data packets
 transmitted within said desired slot or within at least one other time
 slot of said contention window,

and wherein the station further comprises:

- a first array to store the first number;
- a second array to store the second number; and
- an index counter to provide an index of the desired time slot to the first array and to the second array.

15. (Currently Amended) The station of claim 12; A station comprising:
a computer readable medium encoded with computer executable
instructions to control transmission between the station and a shared
wireless media based on a collision rate parameter calculated from at
least a first probability value representing a probability of the station
to transmit a data packet within a desired time slot of a contention
window and a second probability value representing a probability of
said data packet, when transmitted by the station within the desired
time slot of said contention window, to collide with at least one other
data packet transmitted by another station; and
a transmitter to transmit a data packet to said shared wireless
media responsive to the control of said computer readable medium
encoded with computer executable instructions,

wherein the station comprises:

- a first counter to count a first number of data packets transmitted
within said desired slot; and
- a second counter to count a second number of data packets
transmitted within said desired slot or within at least one other slot
of said contention window,

and wherein the station comprises:

- a third counter to count a third number of data packets transmitted within
said contention window from a station;
- a fourth counter to count a fourth number of data packets transmitted
within said contention window from a station; and
- a software module computer executable instructions to calculate the first
probability by dividing the third number by the fourth number.

16. (Cancelled)

17. (Cancelled)

18. (Cancelled)

19. (Currently Amended) The station of claim 14 A station further comprising[:]

~~a processor to control transmission between the station and a shared wireless media based on a collision rate parameter calculated from at least a first probability value representing a probability of the station to transmit the data packet within a desired time slot of a contention window and a second probability value representing a probability of said data packet, when transmitted by the first station within the desired time slot of said contention window, to collide with at least one other data packet transmitted by another station; and~~

~~a transmitter and an internal antenna to transmit a data packet to said shared wireless media responsive to the control of said [[processor]] computer readable medium encoded with computer executable instructions. [[:]]~~

~~wherein the processor comprises:~~

~~a first counter to count a first number of data packets transmitted within said desired slot; and~~

~~a second counter to count a second number of data packets transmitted within said desired slot and within at least one other slot of said contention window.~~

20. (Currently Amended) The station of claim 19 comprising: a software module computer executable instructions to calculate the second probability value by dividing the first number with the second number.

21. (Cancelled)

22. (Cancelled).

23. (Currently Amended) The station of claim 19, wherein the [[processor]] computer readable medium comprises:

a third counter to count a third number of data packets transmitted within said contention window from a station;

a fourth counter to count a fourth number of data packets transmitted within said contention window from a station; and

~~a software module~~ computer executable instructions to calculate the first probability by dividing the third number by the fourth number.

24. (Cancelled)

25. (Cancelled)

26. (Cancelled)

27. (Cancelled)

28. (Currently amended) The wireless communication system of claim 29 ~~[[26]]~~, wherein the first station comprises:

~~a software module~~ computer executable instructions to calculate the second probability value by dividing the first number with the second number.

29. (Currently Amended) ~~The wireless communication system of claim 26;~~ A wireless communication system comprising:

a first station and a second station wherein at least the a first station having a computer readable medium encoded with computer executable instructions to control an access of the first station to a shared wireless media based on a collision rate parameter calculated from at least a first probability value representing a probability of the first station to transmit a data packet within a desired time slot of a contention window and a second probability value representing a probability of said data packet, when transmitted by the first station within the desired time slot of said contention window, to collide with at least one other data packet transmitted by the second station;

wherein the system comprises:

a first counter to count a first number of data packets transmitted within said desired slot; and

a second counter to count a second number of data packets transmitted within said desired slot and within at least one other slot of said contention window,

~~wherein the processor comprises:~~

a first array to store the first number;

a second array to store the second number; and

an index counter to provide an index of the desired time slot to the first array and to the second array.

30. ~~(Currently Amended) The wireless communication system of claim 26;~~ A wireless communication system comprising:

a first station and a second station wherein at least the a first station having a computer readable medium encoded with computer executable instructions to control an access of the first station to a shared wireless media based on a collision rate parameter calculated from at least a first probability value representing a probability of the first station to transmit a data packet within a desired time slot of a contention window and a second probability value representing a probability of said data packet, when transmitted by the first station within the desired time slot of said contention window, to collide with at least one other data packet transmitted by the second station;

wherein the system comprises:

a first counter to count a first number of data packets transmitted within said desired slot; and

a second counter to count a second number of data packets transmitted within said desired slot and within at least one other slot of said contention window,

~~wherein the processor comprises:~~

a third counter to count a third number of data packets transmitted within said contention window;

a fourth counter to count a fourth number of data packets transmitted from a station; and

~~a software module~~ computer executable instructions to calculate the first probability by dividing the third number by the fourth number.

31. (Cancelled)

32. (Cancelled)

33. (Cancelled)

34. (Cancelled)

35. (Currently amended) ~~The article of claim 33;~~ An article comprising a storage medium having stored thereon instructions that when executed, result in:

controlling an access of a first station to a shared wireless media based on a collision rate parameter calculated from at least a first probability value representing an attempt by the first station to transmit a data packet within a desired time slot of a contention window and a second probability value representing a probability of said data packet when transmitted by the first station within the desired time slot of said contention window to collide with at least one other data packet transmitted by a second station;

counting a first number of data packets transmitted within said contention window;

counting a second number of data packets transmitted from a station to provide a second number; and

calculating the first probability value by dividing the second number by the first number;

wherein the instructions when executed, result in:

calculating the second probability by counting a first number

of data packets transmitted within said desired slot;

counting a second number of data packets transmitted within said contention window; and

calculating the second probability value by dividing the first number by the second number.